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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/064,601	07/30/2002	Hsu-Feng Ho	MTKP0018USA	5133

27765 7590 06/09/2005

NORTH AMERICA INTERNATIONAL PATENT OFFICE (NAIPC)
P.O. BOX 506
MERRIFIELD, VA 22116

EXAMINER

AGUSTIN, PETER VINCENT

ART UNIT	PAPER NUMBER
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2652

DATE MAILED: 06/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/064,601

Applicant(s)

HO, HSU-FENG

Examiner

Peter Vincent Agustin

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 February 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) 1-11 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 12-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 1-18 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 July 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- 1) ☐ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 2/25/05
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION***Election/Restrictions***

1. Applicant's election with traverse of Group II, Claims 12-18 in the reply filed on February 25, 2005 is acknowledged. The traversal is on the ground(s) that Claim 1 has been "amended such that the claimed method for controlling an optical disk drive cannot be practiced by another materially different apparatus". This is not found persuasive because the method of Claim 1, despite the amendment, can still be practiced by another materially different apparatus such as, but not limited to, a control circuit that generates a first control signal by using devices other than the claimed frequency detector, phase detector, and low pass filter.

The requirement is still deemed proper and is therefore made FINAL.

2. Claims 1-11 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction requirement in the reply filed on February 25, 2005.

3. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Drawings

4. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the steps of "setting an RF equalizer signal and a differential phase detector (DPD) equalizer signal according to the target frequency" of claim 17, the step of "referencing tabulated data" of claim 18, and/or the corresponding

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structures for these steps must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

5. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

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7. Claims 17 & 18 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Claim 17 recites the limitation “setting an RF equalizer signal and a differential phase detector (DPD) equalizer signal according to the target frequency”. There is no disclosure on how this step is achieved. For example, there is no mention of what frequencies correspond to RF equalizer signal values or what frequencies correspond to differential phase detector equalizer signal values. Claim 18 is rejected for at least its dependence on claim 17.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. Claims 12-16 are rejected under 35 U.S.C. 102(b) as being anticipated by Katoh (US 6,088,311).

In regard to claim 12, Katoh discloses a method for controlling an optical disk drive (please refer to Figure 5), the method comprising: monitoring a data phase-locked loop (DPLL) signal (output of VCO 11, which is “monitored” by e.g., elements 5, 6, 36a & 19); generating a first control signal (input to VCO 11) based on an eight-to-fourteen modulation (EFM) signal (output of element 35) and the DPLL signal; generating the DPLL signal based on the first control signal when the optical disk drive is in a non-seek mode (case when switches 50 & 51 are ON; see column 13, lines 19-38: “when the optical disc device enters the header area”, i.e., the

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claimed “non-seeking mode”); calculating a target frequency for the DPLL signal (Figure 5, elements 15, 16 & 19); generating a second control signal based on the target frequency (case when switch 52 is ON); and generating the DPLL signal based on the second control signal when the optical disk drive is in a seek mode (see column 12, line 64 thru column 13, line 18: “the optical disc device is handling a not-yet-recorded area 25 when the control operation is started”, i.e., the claimed “seek mode”).

In regard to claim 13, Katoh discloses detecting when a rotation speed of a spindle of the optical disk drive changes (Figure 5, elements 41 & 42; note “when the optical disc rotates with stability” in column 11, lines 3-4); and generating the DPLL signal based on the second control signal when the rotation speed of the spindle of the optical disk drive changes (as shown in Figure 5).

In regard to claim 14, Katoh discloses frequency dividing a frequency of the DPLL signal (see Figure 5, element 19).

In regard to claim 15, Katoh discloses setting charge pump currents (Figure 5, elements 7 & 8 are charge pumps) of a frequency detector (6) and a phase detector (5) according to the target frequency (see also column 13, lines 39-45).

In regard to claim 16, Katoh discloses that calculating the target frequency references a track number and a media type of the optical disk drive. As known in the art, the DPLL signal of Katoh will vary depending on the position of an optical pickup with respect to the center of the disc (i.e., the claimed “track number”) and depending on the “media type”. Therefore, since the target frequency is calculated from the DPLL signal, it is understood that “calculating the target frequency references a track number and a media type of the optical disk drive”.

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In view of the rejection of claims 17 & 18 under 35 U.S.C. § 112-1st paragraph, no prior art rejections can be applied.

Citation of Relevant Prior Art

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Shimizume et al. (US 5,636,192) disclose a disc player apparatus having a signal processing circuit which produces a reproduction clock synchronized with a reproduced signal.

Takeda et al. (US 5,745,455) disclose a disc device having eccentricity measurement and clock correction, wherein a signal input to a voltage-controlled oscillator is changed depending on a "track number".

Johnson et al. (US 4,618,497) disclose a system for synchronizing plural data storage devices to a common master, wherein a nominal frequency of a phase-lock loop circuit depends upon a type of disk presently in the drive for a voltage-controlled oscillator.

Conclusion

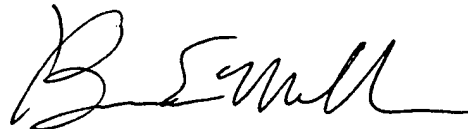
11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter Vincent Agustin whose telephone number is 571-272-7567. The examiner can normally be reached on Monday-Friday 9:30-5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hoa Thi Nguyen can be reached on 571-272-7579. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Peter Vincent Agustin
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A handwritten signature in black ink, appearing to read "B. E. Miller", with a stylized, cursive script.

BRIAN E. MILLER
PRIMARY EXAMINER